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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/029,639	12/19/2001	Anthony Patrick Mauro II	020151	5037
23596 7590 10/14/2008 QUALCOMM INCORPORATED 5775 MOREHOUSE DR. SAN DIEGO, CA 92121				
EXAMINER				
LANIER, BENJAMINE				
ART UNIT		PAPER NUMBER		
2432				
NOTIFICATION DATE		DELIVERY MODE		
10/14/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

us-docketing@qualcomm.com

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### Office Action Summary

**Application No.**

10/029,639

**Applicant(s)**

MAURO ET AL.

**Examiner**

BENJAMIN E. LANIER

**Art Unit**

2432

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 12, 14-16 and 18-43 is/are pending in the application.
- 4a) Of the above claim(s) 34-43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12, 14-16, 18-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

#### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04 August 2008 has been entered.

#### ***Response to Amendment***

2. Applicant's amendment filed 04 August 2008 amends claims 12, 16, 20-22. Claims 34-43 have been added.

#### ***Election/Restrictions***

3. Newly submitted claims 34-43 are directed to a species that is independent or distinct from the species originally claimed for the following reasons: The claims are deemed to correspond to the species listed above in the following manner:

Species 1: encrypting wireless communication utilizing public keys.

Species 2: encrypting wireless communication utilizing shared secret keys generated using a public/private key pair.

4. Since applicant has received an action on the merits for the originally presented species, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 34-43 are withdrawn from consideration as being directed to a non-elected species. See 37 CFR 1.142(b) and MPEP § 821.03.

#### ***Response to Arguments***

5. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 22-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not support the computer program product claims.

***Claim Rejections - 35 USC § 101***

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 22-25 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims are drawn to a computer program. "Functional descriptive material consists of data structures and computer programs which impart functionality when employed as a computer component." (MPEP 2106). When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of

technology permits the function of the descriptive material to be realized. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 12, 14-16 and 18-33 rejected under 35 U.S.C. 103(a) as being unpatentable over Dierks et al. (Dierks), The TLS Protocol, Version 1.0 in view of Huber et al. (Huber), U.S. Patent No. 7,237,261 and further in view of Pathmasuntharan et al. (Pathmasuntharan), U.S. Patent No. 6,955,299.

As per claims 12, 14-16 and 18-33:

Dierks substantially teaches a method comprising generating a first public key for encrypting a first wireless communication and generating, upon termination of the first wireless communication, a second public key for use in a second wireless communication; and determining whether the second public key has been stored prior to establishing the second wireless communication and if its not stored generating a third public key (Section 7.2.1, 7.3 since at the beginning of a handshake first keys are established, then upon termination, new keys are generated when handshakes are begun again and the handshake finished message confirms that the key is stored before communication is established and if it not stored, such as when a re-establishment of a session is attempted and denied, then the handshake protocols begin again, generating a third key).

Dierks fails to teach the protocols being used for wireless communication. However, Huber discloses a method wherein WTLS is utilized in order to achieve end to end security for wireless communications between a terminal and a Web or WAP server (abstract, 2:10-23).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to use WTLS for wireless communications in order to provide end to end security for wireless communications as suggested by Huber (1:62-2:6).

Dierks and Huber fail to teach generating the second public key prior to initiation of the second wireless communication. However, Pathmasuntharan discloses generating a second cryptographic key prior to initiation of a second transaction and after the previous transaction has been completed (13:30-42).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to generate and replace a previous public keys of Dierks with a newly generated one in order to increase security since a new key is used for each transaction as taught by Pathmasuntharan (2:22-34).

### ***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN E. LANIER whose telephone number is (571)272-3805. The examiner can normally be reached on M-Th 6:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Benjamin E Lanier/  
Primary Examiner, Art Unit 2432